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A

CONCISE HISTORY

OF THE

FEBRILE DISEASES

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OCCURRED IN THE PRACTICE

OF THE LATE

ELIJAH F. REED, M. D.,

Between the years 1789 and 1837.

READ AT A MEETING OF THE "HOPKINS MEDICAL ASSOCIATION,"
FEBRUARY, 1837.



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FEBRILE DISEASES.

WHILE medicine, as a science, in most of its branches, has been more improved in the course of the last half century, than, perhaps, in any other like period of time, it must be admitted that, in regard to practice, especially as this relates to febrile diseases, there has never existed a greater discrepancy among practitioners in this country, than for the last twenty-five or thirty years.

This, we conceive, has arisen, in part, from the influence of the different systems of the later theoretical writers, and in part, from a change not only in the diathesis but in the form of our diseases, producing a difference in the pathological views of our practitioners. But sober experience, we believe, has much lessened this discrepancy in practice, both to the credit of the profession and the good of the community.

It is desirable that a still more perfect agreement in principles of practice should be effected in this association, and we conceive, that were its members to communicate histories of such febrile diseases as have fallen under their care, with the treatment adopted, and its result, whether successful or otherwise, the real existing difference in practice would be ascertained, and facts be furnished, that might serve to promote the improvement of medical practice.

With these objects in view, I purpose to give such a history of some of the febrile diseases which have occurred in my practice, with occasional remarks, hoping this may be the commencement of a series of communications on the same subjects, by other members of this association.

I regret that I cannot be so particular in this communication as I should wish, as no history of cases was made at the time, but many of these cases made too strong an impression on my mind to be easily forgotten; others have been since kept in remembrance by frequent relation; and I have improved what means I had in my power to bring all cases related, to more perfect recollection. A knowledge of the commencement and duration of many of the cases has been obtained from my day-books; I having ever been in the habit of charging the medicines used from day to day, and, by examining these, many particulars in relation to some of the cases, have been brought to recollection. I cannot therefore pretend that my relation of cases will be entirely free from error, but shall be careful to state nothing which I do not believe is essentially correct.

The first eight years of my practice (from the spring of 1789 to 1797) were spent in Vernon. During this time, the prevailing fevers were what were then called inflammatory, or the synocha and synochus of Cullen. The former were generally treated successfully, with bleedings, emetics, cathartics and nitre or antimonials in nauseating or smaller doses; terminating commonly in about seven or eight days, by sweating and purging. The latter class of cases commonly terminated by sweating or purging about the close of the second week, on a more moderate antiphlogistic treatment, seldom requiring much support during the last week of disease.

In the winters and springs of these years, cases of pleurisy were of frequent occurrence; commencing, commonly, with severe rigors; these were soon succeeded by great heat, intense thirst and acute pain in some part of the thorax, much increased by inspiration. The pulse was always full and always *hard*, under the hardest pressure of the finger; seldom counting more than ninety or ninety-five in a minute; the tongue was early covered with a thick brown or yellow fur, and was dry and hard. There was often for a day or two in the commencement, but little cough or expectoration, the matter first expectorated was commonly a mere mucus, sometimes streaked, but never mixed with blood; this matter in the course of the disease acquiring more consistence, and becoming more puriform, and commonly streaked with blood.

In the treatment of this disease, a very free and early bleeding would sometimes remove most of the pain; but to do this and render the pulse much softer, which was indispensably necessary, not unfrequently two or three bleedings would be needed in the course of the first twenty-four hours. The after treatment consisted in freely blistering the chest; in keeping the bowels free until the excitement was much reduced; and in the use of nitre or antimonials, with squills or other common pectorals.

The disease commonly terminated by sweating in the course of a week or ten days. I recollect but one protracted case, which proved fatal. The patient was an elderly man, was sick two or three weeks—the last half of the time was rather comatose, his tongue was dry and hard and his teeth were covered with sordes. I have thought this patient might have been too much reduced in the first stage of disease and that he was not, later in the disease, sufficiently supported.

In the spring of 1794, there were a few cases of scarlatina, which, with one exception, were mild, and terminated favorably under a moderate use of tonics, with little or no evacuation, in a week or ten days.

The malignant case proved fatal. I saw the patient, a female aged twelve years, on the morning of the 3d of May; she had complained only of soreness of throat the preceding night; it was now much swollen and filled with aphthæ of a pale color; her tongue

and mouth were moist and colorless, her pulse was frequent and feeble, and she was pale and cold, but was able to walk the room. I *then* considered the case a hopeless one, but prescribed some tonics, but as I now believe, much too sparingly; at night she was more feeble, went into the hands of a root doctor, died next morning, and on account of a rapid change in the corpse, it was buried on the same day.

In these first eight years of my practice, febrile diseases were in general highly sthenic, but in the summers and falls of 1797 '8, (at which time I resided in East Windsor,) there were many cases of fever, which were then called bilious remittents. In most of these I bled in the commencement and made some evacuation from the stomach or bowels, and for some of the first days, in most cases, made moderate use of calomel, or antimonials, but the cases generally lasted two or three weeks, and required the use of bark or other tonics in the later stages, more than I had expected at the commencement of disease.

TYPHOID PNEUMONIA.

On the 5th of January, 1799, I visited my first patient sick with typhoid pneumonia, a female aged about seventy. She complained of some pain in the side, had but little pyrexia, and little cough, and expectorated mucus in small quantity. I directed a moderate cathartic and an epispastic on the chest. On the second day I found her in nearly the same state, and made a small bleeding. On the third day she had expectorated mucus mixed with blood. She was now comatose, her face was very florid, respiration was very laborious, and her pulse was *remarkably* full. I now bled her freely, she appeared in some measure relieved, but her pulse soon became feeble and she died in about twelve hours, on the 4th or 5th day of disease.

On the 12th of February, I visited a male aged about sixty-five years. He complained of pain in the side, which was not severe; he had but slight pyrexia, little difficulty in respiration, little inclination to cough, and expectorated little or nothing, was able to walk the room, and thought himself but little unwell. I made a *small* bleeding, and blistered the chest. On the second day he was in about the same state, and was again bled and blistered. He continued in about the same state until the 5th day of disease, when as he still complained of some pain, I again made a small bleeding. On the night of the 8th day of disease the patient sweat freely and became comfortable, but in the morning purged and became suddenly feeble, pale and cold, with a small, frequent and weak pulse, and appeared to be in a dying state, but in the course of a few hours, with the use of but very little of any stimulus, reaction took place, the pulse became *remarkably full*, the face very florid, respiration very laborious, and the lungs were loaded with mucus. By advice, he was now bled very freely, respiration became more easy, but he died within thirty minutes.

From the 1st to the 15th of March I visited seventeen other patients, sick with pneumonic inflammation. These cases were distinguished from those of high sthenic inflammation, by less pyrexia, heat and thirst; by the appearance of the tongue, (this being less dry and covered only with a thin fur, which was commonly white;) by the pain being less severe in the cases of most pyrexia, or in the cases of least pyrexia, more pungent and always less increased by inspiration or by coughing; by the appearance of the matter expectorated, this being mucus, sometimes mixed, but never streaked with blood, and seldom in any degree puriform in the course of disease; but still more by the state of the pulse, this being always more frequent and small, or if full, less hard than in sthenic disease. There was also, in most of these cases, more remission of fever in the morning, than is common in sthenic disease, with an exacerbation in the evening, during which there was often some degree of delirium.

Eight of these patients were bled on the first or second day; one on the first and third days; one on the first and fourth days, and one on the first, second and fourth days, and six were not bled. These bleedings were very sparingly made, as I doubted the expediency of bleeding at all. All were freely blistered; in the commencement the bowels were moved by a few grains of calomel or other mild cathartic, and in some of the cases, some little use was made of calomel or antimonials, on some of the first days; but after this, all were, more or less, supported by wine, spirits, serpentaria or bark. Little opium was used, and this only after some days of disease. In sixteen of these cases a favorable crisis took place on the seventh day by sweating or purging; but the patient which I bled three times continued sick until the close of the second week, but recovered.

On the 25th of May, I visited another patient with pneumonic inflammation, a male aged about sixty-five or seventy, who in earlier life, had been subject to pleurisy. This case I thought was not so plainly marked as asthenic; I bled him somewhat more freely on the first day, and again on the third, and treated the case on more of an antiphlogistic plan. He died on the eighth day.

As one of those cases which indicate the disposition to asthenic membranous inflammations during an asthenic diathesis, I shall here state that of a male aged about seventy-five, whom I visited in the evening of the 8th of March, in a house where two were then sick with the epidemic. He had been unwell only a few hours and had but little pyrexia. He complained of a slight pain in the head, but of a severe and excruciating pain in the throat, and across the loins, with a constant inclination to void urine, which he had done frequently in small quantity with much pain; his throat was swelled and the fauces were of a very dark color. To ease from these excruciating pains, strongly urged by the patient, I immediately, and now believe, injudiciously, made a small

bleeding, while the patient was in a sitting posture. His pains immediately subsided, he became faint, was laid on the bed, and immediately expired.

There were again some few cases of this disease in the fall of this year, one of which proved fatal; an infirm man aged about seventy-five, who had been accustomed to bleeding. I bled, at his request, *merely* for a pain in the side. For several days after, he was not much unwell, but becoming suddenly much worse, I was called to visit him, and found him with pneumonic inflammation. I directed a cathartic and epispastic—on the next day he died.

Although this disease was not again epidemic until the fall of 1815, I believe that from 1799 to that time, there was no year without some cases of it; of these there were but few in the years 1800 '1 '2 '3 '4 and 5, but more in the years 1806 '7 '8 '9 and 10, and still more in 1811 '12 '13 and 14.

On the 5th of March, 1801, I visited a man aged about sixty, and broken down by intemperance, on about the fifth day of disease; he died on about the 8th day, with but little medication.

On the 24th of March, 1806, I visited a man aged about thirty-five; he had much pyrexia and pain in the side, with difficult breathing; the heat had been preceded by rigors, and he had been sick only a few hours. I bled and puked him; on the second day bled and blistered him; on the fourth he took castor oil, and on the seventh died, his lungs filling with bloody mucus.

On the 24th of September, 1812, I visited a man aged about thirty, on the first day of this disease. I bled, purged and blistered him, and again on the fourth day, and prescribed calomel in small doses, and laudanum with antimonial wine. In about one week he was nearly free of any lung affection, but his fever continued with remissions and much sweating. Bark, opium and spirits were prescribed, but owing to a prejudice of his wife to these articles, very little of either was used, and he died about the close of the second week.

On the 25th of November, 1812, I visited the wife of this patient; she had been unwell for several days, and had taken an emetic and cathartic without advice. She had now much pyrexia, with pain in the chest, and wished only that I would bleed her, and leave for her some laudanum with antimonial wine and squills. I bled her, left for her the medicines, and persuaded her to blister. I bled her again the next day, at her request. She died on the 4th of December.

About this time I visited a young man of about twenty years of age, on the third day of disease. He had been purged and blistered by advice of another physician, who had been dismissed, at his own request, saying the patient would die. I was of the same opinion, and requested the advice of a very respectable physician of much experience, which I had. The patient was bled, blistered and treated on a moderate antiphlogistic plan, and died on the 7th or 8th day.

Two sisters, aged from forty-five to fifty years, both in consumption, and one far advanced in that disease, were attacked with typhoid pneumonia, one on the 29th, and the other on the 30th of March, 1814. The first died on the seventh day, and the other on the fourth of this disease, without any efficient medication.

These eight cases were all that proved fatal from the spring of 1799 to the fall of 1815.

Two of these patients were aged and infirm, and had no medical attendance until after some days existence of disease. Two were consumptive. In one case medical directions were disregarded by the nurse, and one prescribed the means of cure.

Of these eight patients five were bled. Among those who recovered during this time, I feel confident that two only were bled. One of these, a female aged about fifty, I visited on the 27th of December, 1812, on the first day of disease. She was puked with ipecac, and purged with calomel; she was repeatedly blistered, and on the fourth day was bled; through the first week she was in the use of calomel, in small doses, with opium; through the second week in the use of opium, serpentaria and cinchona.

The other, a male aged about fifty, I visited on the 4th of January, 1813, on the first day of disease, bled him and prescribed antimonials and an epispastic; on the second day, calomel with opium; on the third, tincture lyttæ and opium; on the fourth, serpentaria. The disease lasted about one week.

In the summer and fall of 1815, there were many cases of fever, and among these were some commencing without any lung affection, but in which the patient, in the course of two or three days, would complain of slight pain in the side, and expectorate mucus, somewhat bloody. The pain would commonly be wholly removed by a single blister, and expectoration cease at the close of the first week, although the fever would commonly continue one or two weeks longer, requiring, more or less, the use of tonic remedies. But about the middle of November, 1815, typhoid pneumonia commenced as an epidemic, and continued as such until about the middle of March, 1816.

Previously to giving an account of this epidemic, I would observe that during its prevalence, I was unable to make my charges so regularly, and specify so particularly, the remedies used, as I have done at all other times. And further, that in cases where this was done, such was the number of sick in the same family at the same time, or in quick succession, that I have not been so well able to avail myself of the assistance of my books, in giving the history of some cases. I have, however, attempted to give the history of none in which I am not satisfied I am essentially correct.

The attack of this disease was in most cases very sudden, and without any previous indication of predisposition, unless an occasional momentary pain, shifting to various parts of the body, which was felt by some few, in the course of the twenty-four hours preceding the attack, may be considered such.

The cases differed much, not only in the manner of attack, but in the progress of disease. They also differed much in degree of malignancy; the patients in the greatest danger commonly believing themselves in little or none; and appearing so likewise to others unacquainted with the disease.

Some cases commenced with a sense of coldness and rigors which were always slight. These were soon succeeded by febrile heat and pain in some part of the chest, always confined to a very small spot, somewhat, but never greatly increased by inspiration or cough, the patient being able to distend the lungs in some good degree. The pulse, though not very small, was never hard, and not less than from 110 to 120 in a minute. The tongue would be covered with a thin white fur, but would never be hard nor dry, nor would the patient be very thirsty. The matter expectorated was a bloody mucus, and in these cases only, or in those of most excitement, did this assume in the course of disease, anything of a puriform appearance. These were the most favorable cases among those which needed much medication and were evidently the least asthenic. In this class of cases I commonly commenced the treatment by procuring some evacuation from the bowels, with calomel or castor oil, and used calomel with Dover's powder for some of the first days, when, if the heat was abating and the skin becoming a little moist, or pulse was becoming smaller and increasing in frequency; or, without much increase in frequency, was becoming soft, and the patient much inclining to sweat, I omitted the calomel and commenced the use of opium, spirits and serpentaria or cinchona. In the use of these medicines, under these circumstances, the pulse would frequently become more full and less frequent, expectoration more free and respiration more easy; but in these cases, when excitement was not very much reduced, I have found more benefit from the use of squills and seneka, as expectorants, than in other cases, and when the lungs were much filled with mucus, have found an emetic of ipecac more beneficial than in cases of less excitement. All of these patients were freely blistered.

In this class of cases, bleeding might appear to be indicated, and in five of them I bled, and also in one other, which, although it commenced with expectoration of bloody mucus, in other respects was similar. Three of these patients recovered and three died.

A female aged about twenty, in the night of the 19th of February, commenced expectorating very bloody mucus very freely, without pain or pyrexia. I prescribed a laxative Dover's powder and an epispastic. On the second day she had much pyrexia, with pain in the chest. I bled and blistered her. On the third day she took opium and ipecac. On the fourth, her lungs were loaded with mucus and respiration was difficult, and she was puked with ipecac. The disease subsided about the seventh day, with a moderate use of stimulants.

On the 27th of Dec. 1815, I visited a male, aged about twenty-

two, naturally robust and plethoric. I bled, purged and blistered him, and he had previously made use of a cathartic. His pulmonary affection was much less at the close of the first week, but fever continued until about the close of the third, when there was hemorrhage from the bowels, which was suppressed by injections of laudanum with acetate of lead. He was in a *moderate* use of opium, bark and spirits, until the 1st of February, about the thirty-fifth day from the attack, when he became cold and senseless, with frequent suspension of breathing for a half minute or more. Nothing had been swallowed for an hour or two, although liquids had been turned into his throat.

While respiration was suspended, a sudden and full inspiration was effected by passing a feather, wet with aqua ammonia, well up his nostril, the patient at that instant, throwing his mouth widely open. Such an opportunity was improved to turn into his throat a large table-spoonful of brandy, with twenty drops of laudanum, which was instantly swallowed without in the least arousing the patient. This dose was regularly given every fifteen minutes, for three or four hours, the use of the feather becoming unnecessary after a few doses. In this time, respiration had become regular, the patient warm, wakeful and perfectly rational, and with a more free use of bark, opium and spirits than heretofore, eventually recovered.

On the 25th of March, 1816, I visited a male, aged about thirty; bled and blistered him, and prescribed antimonials in small doses. On the third day, serpentaria, and on the fourth, bark and opium; but during part of the night, the opium was omitted. On the morning of the fifth day, found my patient cold, senseless and unable to swallow. He was revived by spirits and laudanum, got down his throat by means of a feather and aqua ammonia. On the morning of the sixth day, he was in the same state as on the fifth day, and from the omission of the opium in the preceding night. He was now supposed so near dead, that some arrangements were making for the attendance of his funeral, but he was again revived by the former process, and by a continued and more free use of opium, bark and spirits, was convalescing from the close of the second week, and eventually recovered.

On the 22d of February, 1816, I visited a male, aged about seventy, and bled and blistered him; bled him again on the third day, and he died on the thirteenth.

On the 3d of March, 1816, I visited another male, aged about seventy, and purged and blistered him; on the second day he was bled, and again on the third, and died on the eighth.

On the 5th of March, 1816, a female, aged about sixty, complained of an occasional pungent, but transient pain, alternately, in one ankle and the bones of the nose; but was in no other way indisposed. On the next day she had fever with much affection of lungs. She took a cathartic, was blistered and used Dover's powder; was by advice bled on the sixth day, and died on the eighth.

The bleedings, in all of these cases, was rather small; but were the most free in the two protracted cases.

The blood drawn in these cases, and in all others of this disease, when notice was taken of it, was of an uncommon dark color; and if the stream of blood were made to strike on the side of the vessel into which it was drawn, as it run down its side, it would be of a dirty or muddy color, exhibiting small granules, like fine sand, passing down the side of the vessel more slowly than the rest of the fluid; and no visible spherules of blood could be made to roll across the vessel, by an oblique stroke of the stream on the surface of the blood drawn, as may be seen in most sthenic disease or in health. The blood on cooling, would exhibit a very remarkably thick buff, but very little cupped, of a lard color, or of a yellowish tinge. This buff might be separated from the anor, with the greatest ease; and on slight motion of the crassamentum, the serum would become turbid with red globules.

A great proportion of cases commenced with moderate febrile heat, which was preceded by very slight chills, or none at all. The pulse was small, and not less than one hundred and twenty in the minute; respiration was frequent, of which the patient was insensible, making no complaint of difficulty of breathing, although he would be able to distend the lungs but partially; the pain in the chest which was commonly slight, was very little, or not at all, increased by inspiration. Some of these patients would, in the very commencement, with but little cough, expectorate very freely, a bloody mucus.

In most of these cases I procured moderate evacuation from the bowels by means of calomel or castor oil; blistered freely and made use of Dover's powder, with or without calomel; but seldom used any calomel longer than two or three days, commonly in this time, finding my patients needing support, I had recourse to the use of more or less opium, spirits and serpentaria or cinchona; and some patients when apparently near a fatal termination, recovered under the use of these remedies.

There were several cases, in all respects, like the last described, except that the patients had little or no cough, and no expectoration, nor apparently much lung affection, until about the seventh day of disease, when the lungs would suddenly become filled with bloody mucus and the patient die comatose. These cases I treated much as the former, but made more free use of squills, seneka and ipecac, but with no sensible good effect. Would these patients have been relieved by early and copious bleeding?

There were several cases in which the pulse was very small, and one hundred and thirty or one hundred and forty in the minute; the countenance of the patient sunken; the temperature of the body much below that in health; the skin about the mouth, under the eyes and on the ends of the fingers, of the color of black lead; the tongue moist, and but little or not any furred; the patient not thirsty, and not disrelishing food; in respiration, which was frequent, very little air was inhaled, of which the patient was insensible, and complained of no difficulty in breathing nor of pain in

the chest, unless questioned, and this pain was not increased by inspiration. The patient would continue to sit or walk his room, until on the seventh day, he would suddenly become comatose and insensible, his lungs filling with mucus, and would die on the following day.

These patients were freely blistered, and made free use of various diffusible stimulants; but, in no case, with the least sensible good or bad effect, nor was there the least change produced by drastic purging with Lee's pills and calomel, which had been taken by one patient before I prescribed for him.

One patient, a female, aged about fifty-five, on the morning of the 27th of January, 1816, felt for a few minutes, a very severe pain near the hip; was well through most of the day, but was again attacked with pain in the same parts. This continued, with a weak and frequent pulse, with little pyrexia or lung affection, for about one week, when the pain suddenly subsided, her lungs became filled with bloody mucus, and she died comatose, on the first or second day after.

Two cases commenced with coma.

One of these, a male, aged about thirty, complained of some slight indisposition in the evening of the 1st of February, 1816. Next morning he was found in a state of perfect coma. By frictions, application of heats, blisters and diffusible stimuli, he was aroused. He now had pain in the side, with much pyrexia, cough and expectoration of bloody mucus.

This patient recovered, but cannot say whether at the close of the first week or later; nor can I be very particular in giving the treatment, (as there were several others in the family sick at the same time) but well recollect that I prescribed spirits, opium and bark, early in the disease, and believe from the first, that these were used by the nurse more freely than I had at first directed; but finding my patient expectorating pretty freely, matter more puriform than I had seen in *any* other case, a free use of the same medicines was continued by my directions, *making*, (as I supposed) the case resemble a true case of pleurisy, much nearer than any other case during this epidemic.

The other patient, a female, aged about seventy-five, was suddenly attacked in the evening of the 19th of February, 1816, as with apoplexy. I saw her within thirty minutes; her lungs were then filled with bloody mucus; external means were used to produce reaction, no medicine was swallowed, and she died on the next morning.

Another female, in child-bed, two or three days after delivery, about the 24th of March, 1816, was attacked with fever and apparent peritoneal inflammation. She died on the 31st of March, expectorating bloody mucus.

None of these patients, even in the cases of most pyrexia, complained of pain in the head. But many of those who had least pyrexia would, if questioned, say their heads were "clear, re-

markedly clear," or, "big and light;" these were pleasurable sensations. This was invariably the case when the pulse was very small and frequent, and the temperature of the body much below that in health, with discoloration of the skin.

In some cases where there was but little febrile heats, the patients would, at times, be exceedingly distressed, with a sensation like that of strangulation, as if produced by compressing the trachea immediately above the sternum, inducing a belief, not only of the sufferer, but of bystanders, that the patient was dying. This affection might always be removed for the time, almost instantly, by a small draught of very hot sling, or a spoonful of hot infusion of capsicum, by essence peppermint on sugar, a strong dose of camphor or aqua ammonia, or by any means making a sudden and very sensible impression on the fauces; but their recurrence could be prevented only by a regular use of opium, spirits and cinchona. Every patient thus affected recovered.

Delirium was very seldom seen, even in the slightest degree, until within an hour or two of the death of some of those patients that did not die comatose. In these cases the delirium much resembled hysteria; the patient apparently happy, conceiving himself well, and talking with inconceivable volubility to the last breath.

Two protracted cases among those patients whom I bled, have been related; one of two weeks continuance, and one of five or six. These, with one other, are all the protracted cases during this epidemic.

On the 23d of November, 1815, I visited a male, aged about thirty; gave him an emetic and prescribed antimonials; on the second day he was blistered, and made use of Dover's powder, which was continued until the seventh day, when I found him with a feeble pulse, lungs loaded with mucus, and respiration difficult. I kept him for some hours a little nauseated with ipecac, occasionally exciting slight puking by giving him hot sling with laudanum and peppermint. In this time he was relieved, and by a moderate use of opium, spirits and cinchona, at the end of the second week was convalescing.

These three protracted cases, and a very few which terminated favorably on or about the fourth day, were, I believe, all among those who recovered where there was not a perfect crisis on or about the seventh day. And with the exception of the two cases related, in which the patient died in the commencement without medication, I believe that all my patients who died with this epidemic, either died on the seventh or eighth day, or at that time went into a state from which there was no recovery. The patient either becoming suddenly comatose, or much more comfortable, febrile heat subsiding, expectoration lessening, lungs more free of mucus, respiration easy, but inspiration short and the pulse smaller and much increased in frequency, these patients commonly died on the eighth day.

Beside the remedies which have been mentioned in my more common treatment of this disease, I made use, in some of the more sunken cases, of Fowler's solution, tincture lyttæ, and infusion of capsicum; and in some others, tincture sang. con., and of tincture lobel. inf., but more sparingly than I have since used them, and with less sensible good effect. I also made some use of seneka, squills and other pectorals, without any sensible good effect, unless in cases accompanied with the most febrile heat. In the lower, sunken cases, opium and other diffusible stimuli, with tonics, were the best expectorants.

The number of my patients with this disease, during its continuance as an epidemic from about the middle of November, 1815, to the middle of March, 1816, cannot now be ascertained; but from an enumeration mentally made soon after the subsiding of the epidemic, I believe the cases were not less than one hundred and fifty; and if to these be added the cases which occurred before the close of the year 1816, I think they must have exceeded this number.

Of these patients, nineteen died; the first on the 21st of January, and the last on the 31st March, 1816.

Four of the fatal cases have been related; one of which, a female, aged about seventy-five, died in about twelve or fifteen hours from the attack, without medicine. Of the others, one was a man aged about eighty, who died in a very few minutes after I first saw him, and in about twenty hours from commencement of disease, without medication; one was an intemperate man, who had been sick two or three days without medication, when I made my first visit; one was a child which had been sick two or three days before I saw it; one was near death with pthisis pulmonalis, and one died of relapse from fatigue and exposure to cold while in a state of convalescence.

Such was the number of sick during more than the last half of the time, that I was under necessity of visiting from twenty to thirty patients daily. Under these circumstances, I could neither pay that attention which many cases required, nor have that advice of which I should gladly have availed myself, if circumstances had permitted.

Dr. Bruce, of Hartford, saw a female, aged about thirty, in the commencement of disease, and visited her daily until the fatal termination of the case. He also visited a child three or four years old, on the second day of disease, and from that time daily until the patient was convalescing, and made a single call on several others, one of which died. The late Dr. Everett, of Canton, made a single visit to a child, which died. The late Dr. Coggs well, of Hartford, visited another patient once, which died. The late Dr. Sparhawk, then of Hartford, visited one patient once, which died, and Dr. Cooley, of Manchester, visited another twice, which died.

These were the only instances of consultation during this epidemic, the most distressing and fatal that I have ever witnessed.

In this situation of uncommon responsibility, I was under the necessity of prescribing for my patients, not only with much mental anxiety, but with great bodily fatigue; the number and state of my patients while this disease was most prevalent, requiring my unremitting attention by night and by day, and preventing my retiring for rest for twenty-two days in succession, or getting any sleep during that time, except in the sick-rooms of my patients. During this time I made no regular account of my services, to which circumstance it is owing that I have not been more particular in the relation of some cases given.

There were five or six cases of this disease in the northern part of the town, in February and March, 1816, two or three of which proved fatal. There were also two cases about this time in the south part of the town; both proved fatal, one of which died in a few hours from the attack, without medication. There were also in the fall of 1815, one other fatal case in the south part of the town, and two others in the east part. Beside these cases, which were under the care of other physicians, I know of none but those which were under my care in the years 1815 and 1816.

In the winter and spring months of, I believe, each of the succeeding years, there were some few cases of this disease. I have supposed the number in these eight years to have been eighty; four of which patients died, a male aged eighty-four, on the 11th of March, and a female aged about seventy-five, on the 10th of December, 1818; a male aged about sixty, on the 15th of January, 1820, and a male aged about fifty, (the disease accompanied with delirium tremens,) died in February, 1822.

In February, March, April and May, 1825, this disease was again epidemic; during which time, and in the remainder of the year, there were probably fifty cases, of which five proved fatal.

A male aged about sixty, died on the 20th of February; a female aged about seventy-five, on the 18th of March, and another female of about the same age, on the 21st of March, and another female aged about forty, on or about the 15th of May.

In February, March and April, 1826, there were a few cases of this disease, I suppose fifteen. The disease was mostly among children, and was less malignant than I had seen it any preceding year, with, perhaps, the exception of 1799, and only one patient died. A young man whom I had visited from the 6th to the 12th of April had recovered from this disease, and had been abroad at hard labor about one week, when he was again attacked with this disease on the 27th of April, and died on the 3d of May.

On examination of his lungs after death, the most of one lobe was found hepatized; different parts of the lungs adhering to the pleura costalis; a very small quantity of a sanious fluid in some of the bronchia; and, on cutting into the hepatized parts here and there, a single drop of a thin and milky appearing fluid, but very little resembling pus.

In the years 1827-8, the disease continued milder, but more

affecting adults. I have supposed the number of cases in these two years, thirty. One patient only died. A female, aged about forty-five, broken down by intemperance, without nursing, and with but little medication, died in September, 1827.

In 1829, the disease was more prevalent. The cases were probably not less than thirty, two of which proved fatal.

A female, aged about seventy or seventy-five, died on the 12th of March, and a male aged about seventy-five, on the 22d.

There were cases of this disease in each year, from the 1st of January, 1830, to 1st of January, 1837, but at no time were they very prevalent. I have supposed the whole number to have been fifty, five of which proved fatal.

A female, aged about eighty-five, died on the 28th of January, and another female, aged about sixty-five, and previously supposed to be laboring under hydrothorax, on the 19th of May, 1830.

A child, aged three or four, died on the 16th of July, 1832, a male, aged seventy-two, on the 5th of December, 1834, and a female, aged about fifty, on the 27th of December, 1835.

In the month of January, 1837, I had five cases of this disease. One of these patients, a female, aged seventy-one, died on the 14th. The number of my patients with this disease, from the 1st of January, 1817, to the 1st of February, 1837, I do not pretend to ascertain. I have supposed the number in different periods of this time, only for the purpose of approaching nearer the truth than I could otherwise have done, and believe that the number of 260, as supposed, is not too great.

The whole number of fatal cases during this time, was nineteen.

In the year 1799, no child was the subject of this disease, but since that time it has occasionally occurred among children, and more particularly in the years 1826, '7, and '8.

When this disease attacks children, it most commonly appears in one of the two following forms: The patient, in the commencement, has a very frequent and sharp pulse, with much heat, and a florid countenance; is often somewhat comatose, and respiration is somewhat laborious, with more or less of mucus on the lungs, which is sometimes but not always bloody. Or, which is more seldom the case, the pulse, although frequent, is soft; there is but little heat on the skin, or fur on the tongue, respiration is quick, but not laborious, and, in the commencement, there is but little mucus on the lungs, and the child is either in some degree of stupor or restless.

In the former of these cases, after procuring moderate evacuations from the bowels by calomel or oil, I have commenced the use of calomel in small doses, and of tinct. sang. con. in such doses as the stomach would bear, combining with this either laudanum or elixir paregoric, omitting the use of the calomel whenever the pulse lessens in frequency, and heat abates; now combining with the tinct. sanguin. more laudanum or elixir, and directing a mod-

erate use of spirits in warm sling, or of aqua ammonia, or infusion of capsicum. If, in the course of disease, the lungs became much loaded with mucus, previous to an abatement of heat, or softening of pulse, I have found light puking, induced by addition of tinct. lobelia inf. to the tinct. sanguin., or of ipecac, or squills, useful.

In the other form of the disease, I have commenced the treatment with the use of tinct. sanguin. with tinct. opii. or elix. par., making some use of weak, warm sling, or infusion of capsicum; continuing these if the pulse became more full and less frequent, as it often will; but if the pulse should become more frequent and more feeble, and the lungs more loaded, I have prescribed, in addition, tinct. lyttæ, or Fowler's solution, in very small doses, further supporting the patient, in the most sunken cases, by sulph. quinine.

In this mode of treating this disease, when children are its subjects, I have some confidence, having lost but one of these patients in the last twenty years.

This was a child three or four years old, which I first saw when it had been sick three or four days, and in a state from which I did not expect it would recover. It died July 16th, 1822.

In one case only has this disease commenced with diarrhea.

On Dec. 11th, 1830, I visited an intemperate man, aged about sixty, on the third day of disease, he having had diarrhea from the commencement. His pulse was full, but soft, and not remarkably frequent; was expectorating bloody mucus, of a yellowish tinge, in considerable quantity; complained of no pain, but was slightly mentally deranged.

One tablespoonful of spirits, one of infusion of capsicum, with one teaspoonful of tinct. sanguin. and one of elixir paregoric, or ten or fifteen drops of laudanum, was given every thirty minutes from Saturday evening until the next Thursday morning; the patient in the course of Wednesday night first tasting the pepper. He also, from Sunday night to Thursday morning, took about six ounces of decoction of cinchona, and from six to twelve grains of sulph. quin. in the course of each twenty-four hours. On Thursday morning he was rational and nearly free from fever, having had no evacuation from the bowels from the commencement of medication, and soon recovered with a moderate use of tonics.

For the last twelve or fifteen years, I have made a much more free use of tinct. sanguin., tinct. lobelia inf., and of tinct. or inf. capsicum in this disease than formerly, and am of opinion that in cases of much pyrexia and difficult breathing, the free use of tinct. sanguin., with or without calomel in small doses, tends to lessen heat, soften the pulse, lessen its frequency, procure ease in breathing, and promote expectoration. But that, in cases with a small and very frequent pulse, with but little heat, and if breathing be difficult from much mucus in the lungs, calomel is injurious; and that, in these cases, the use of tinct. sanguin. with opium, of spirits, of capsicum, and of sulph. quin. or decoction of cinchona, will

tend to increase the fullness of the pulse, lessen its frequency, render expectoration more free, and respiration more easy.

So generally has a crisis in this disease occurred on the seventh day, that when the disease has terminated favorably at an earlier period, I have believed this the effect of medication happily adapted to the case; and that, when the fever has continued two weeks or longer, this protraction has been effected by medication, and that the disease would otherwise have ended on the seventh day, either in death or recovery.

In the five protracted cases which I have related, I bled two of the patients once; one I bled twice, and one I bled three times; all were purged, and used either calomel or antimonials, and near the close of the first week, I believe they were not sufficiently supported. To these causes I have attributed the protraction and also the hemorrhage from the bowels in the case longest protracted, having never known a hemorrhage of this kind occur in this disease in any other case.

These five protracted cases related, are all which I can recollect among my patients, but have seen others which, like mine, might have been induced by a reducing mode of practice.

On the 30th of October, 1830, I visited, in consultation, a female, aged about thirty, on about the sixteenth day of disease. She had been purged with calomel, and had used it in small doses through the first week or longer, by which her mouth had been affected, and which was now, with her throat, filled with thrush; her pulmonic affections had in great measure subsided, but her breathing was not free, and deglutition was very difficult. She had had, for several days, some diarrhea, and her bowels were somewhat tumid. There was so much stupor upon her that it was with difficulty her attention could be attracted. Her pulse was small and frequent, and she was inclined to sweat.

In the course of the next twenty-four hours, she took six pills of opium, of from one and a half to two grains each, eighteen drops of Fowler's solution, with sixty of laudanum, about a half pint of decoction of cinchona and galangal, about a half pint of spirits, and about a half pint of pepper tea, to which her throat was at first insensible. On the next day, her pulse was more full and less frequent, her mouth and throat much more comfortable, deglutition more easy, her sweating had subsided, and she was free from stupor.

This course was continued for about a week, during which time she had no evacuation from the bowels. She was now convalescent, and soon recovered under a moderate use of tonics.

Copious bleeding, in the commencement of this disease, has been said to have produced most salutary effects. That this may have been true in some cases, I am inclined to believe, but more from the affirmation of others than from my own experience. But in what *particular* cases, I am *yet* uninformed; and that it can be indiscriminately and advantageously used, I am to be convinced by the experience of others, for there are many cases in

which bleeding appears to me not indicated, and in which I have found a very different practice successful.

Of all the patients with this disease under my care, I believe I have bled only twenty-six, sixteen of which recovered, and ten died; but of these sixteen, three proved protracted cases, the patients recovering under a free use of stimulants and tonics; and of the other thirteen which recovered, eleven, which were sick in 1799, I have ever believed would have recovered without bleeding. These bleedings, as has been noticed, were generally small, and not always made on the first day, but in some cases repeated.

Are there cases in which bleeding is more indicated by difficult respiration, than by the state of the pulse, in which an early and copious bleeding, immediately followed by a free supporting course, would be the most successful practice? And might those cases in which with a small pulse of 130 or 140 in the minute, the temperature of the body of the patient being much below that in health, his countenance sunken, and lips and the skin on different parts of the body of a lead color, be successfully treated in this way?

The number of cases of pneumonic inflammation, which I have termed pytyphoid, which have fallen under my care in the course of the thirty-eight years, from Jan. 1st, 1799, to Feb. 1st, 1837, it would be impossible to ascertain, or compute with any great degree of accuracy; but to approach the number as nearly as practicable, I have considered different portions of this time, and have made the following estimate, which, although it probably is, in some particulars, incorrect, I believe does not exceed the true number in the sum total:—

In the winter and spring of 1799, the number as ascertained, was	- - - - -	20,	of which 3 died.
In the succeeding months, (supposed,)	- - - - -	5,	" 1 "
In the next 11 yrs., to 1st Jan. 1811, (sup.)	- - - - -	20,	" 1 "
In the 4 yrs., 1811, '12, '13, '14, (sup.)	- - - - -	45,	" 5 "
In the years 1815, '16, as estimated soon after,	- - - - -	200,	" 19 "
In the next 8 yrs., to Jan. 1835, (sup.)	- - - - -	80,	" 4 "
In 1825, in the spring—the disease epidemic—(supposed,)	- - - - -	50,	" 5 "
In 1826, (supposed,)	- - - - -	15,	" 1 "
In the 3 years, 1827, '28, '29, (supposed,)	- - - - -	60,	" 3 "
In the next 6 years, to Jan. 1837, (sup.)	- - - - -	50,	" 5 "
In the month of Jan. 1837, were sick,	- - - - -	5,	" 1 "

Estimated number of patients in the 38 yrs. 550, of which 48 died.

This list is intended to include all cases of this disease, however mild, and all who have been much conversant with it will be sensible that in such a list will be included many cases in which the patient would recover with little or no medication, or even with light, bad treatment. In such cases it is admitted that success is

no certain proof of the best treatment. They also know that among the aged, and those broken down by intemperance, there will be many fatal cases under any mode of treatment; and in my list of fatal cases, there is, I believe, an uncommon proportion of these.

Of the forty-eight who died of this disease, three only were children. Of the adults (of whom nineteen were males, and twenty-six were females,) five were from twenty to thirty years of age; thirteen were from thirty to fifty; thirteen were from fifty to seventy; and fourteen were from seventy to eighty-five years of age.

Two of those whom I visited, died, one in a few minutes, and the other in a few hours, without medication. One was broken down by intemperance, had but little nursing or medication. Three were intemperate, two of which I first saw on the second or third day of disease, and the other became affected with delirium tremens and unmanageable. Three were in a consumption. One had been supposed previously laboring under hydrothorax. One died in a relapse from fatigue and exposure to cold while in a state of convalescence; and one in a recurrence of disease, after having been at hard labor in the open air for about one week.

Thus, beside the two cases which proved fatal without medication, there were ten others of the remaining forty-six, which, if curable in any way, were very improper cases to test the propriety or impropriety of any mode of practice which should not prove successful.

Having been located where this disease has been much more prevalent than in any other place within my knowledge, and having lost, in the time specified, more patients by this than by all other febrile diseases, it has been my intention in this account to notice, as far as was in my power, every particular relating to the disease, tending to an elucidation of its character, and every particular in my treatment that would show the effect of medicine, whether salutary or injurious, hoping, that if useful in no other way, it might be of some service by attracting the attention of this Association to this important subject.

In the summer and fall of 1799, and of 1801, '2, and '3, there were many cases of common typhus, in which, after some evacuation from the first passages, in the commencement of disease, I found tonics necessary, and, in some cases, a pretty free use of them early in the disease, the cases in general continuing two or three weeks. But in the year 1800 fevers were not so asthenic; they more resembled the synochus of Cullen. In some of these cases I bled, and in many made some use of calomel or of antimonials in the commencement, but most of them required the use of tonics in the course of the disease.

In one case, the patient, a robust, plethoric male, with much pyrexia, and, for some days, with some pain about the chest, I made six small bleedings in the course of the first week, and purged and blistered him. On about the tenth or twelfth day, he

began to expectorate; I now commenced the use of tonics, and he eventually recovered, but the fever was of three or four weeks continuance, and was probably protracted by too much evacuation.

DYSENTERY OF 1801.

While typhus was common in the fall of 1801, dysentery commenced as an epidemic. In September, October, and November, I visited from forty to fifty patients with this disease, most of which were children. When adults were the subjects of disease, it commenced in most cases with slight chills and pain in the bowels, back, or limbs, soon succeeded by pyrexia, with a small and frequent pulse, and dysenteric evacuations, with distressing tenesmus. But in some cases, more especially among children, the disease commenced with diarrhea, the evacuations of some becoming dysenteric, with tenesmus and pyrexia, with the same small and frequent pulse as in other cases.

I visited my first patient with this disease, a child two or three years of age, on the 9th of September. In this case, I made use of some laxatives, and of some laudanum; the evacuations continued, and the child died on the seventh day of disease.

On the 27th of September, I visited a young man, on about the third day of disease, who had taken one or two doses of cathartic salts. His evacuations were very frequent, and tenesmus very distressing. I directed a pretty free use of laudanum, and on the next day, the fourth of disease, he was much more comfortable. But as there had been very little discharge of fecal matter from the commencement of disease, I directed a dose of castor oil and continuance of laudanum. By the oil little or no discharge of fecal matter was effected, but the tenesmus was much increased. On the fifth day the laudanum was continued, and another dose of oil was given, producing all the bad effects of the former. The next four days he was kept much more comfortable by a free use of laudanum; but as there had been but very little discharge of fecal matter from the first, another laxative was used, with no other effect than an increase of disease. Laudanum was now directed, with hot sling, in such doses as should keep the patient more comfortable, and laudanum by injection immediately after each evacuation. He now began to improve, but the disease was followed by diarrhea, requiring some use of tonics with laudanum for several weeks.

On the 29th of September, I visited a young child affected with diarrhea, but with little or no tenesmus. I directed an infusion of rhubarb and senna. The operation was followed by dysenteric evacuations and tenesmus. These were not suppressed by laudanum given, and no injection was retained. The child died on the sixth or seventh day.

On the 4th of October, I visited another child affected with diarrhœa, with little or no tenesmus, and made use of a cathartic, with an increase of complaint. I was now determined to depend

on a free use of opium alone, but this plan was not approved of by the parents; another physician was employed—the patient took a little rhubarb daily, used but very little laudanum, and died in a few days.

On the 4th of October I visited another young child which had been several days sick with dysenteric evacuations and tenesmus. I directed laudanum injections, and laudanum by the mouth, if necessary. I saw it again in two or three days; little laudanum had been given, and no injection had been used, and the child died without any efficient medication.

In further proof of the bad effect of cathartics, one other case may be adduced. About this time I was consulted in the morning in the case of a child, from one to two years old, which had been troubled with diarrhea the preceding night, which had now subsided, and the child was apparently well and playful. I advised the use of laudanum in case the diarrhea returned, and prescribed nothing further. The diarrhea did not return, and the child continued apparently well; but, to prevent disease, at sunset, by the advice of another physician, it took castor oil. With its operation dysenteric evacuations were procured, with tenesmus, and the child in three or four days died under the care of the physician who had given the oil.

Having noticed the injurious effects of cathartics and of laxatives, not only in the fatal cases related, but in others from which the patients recovered, I was determined to make the least possible use of them in my future practice, and, by means of opium, control the discharges, and procure ease, so far as practicable, for my patients.

To produce these effects by opium it was commonly necessary that it should both be taken by the mouth and used by way of injection. In all cases when the evacuations were very frequent, and tenesmus very distressing, it was necessary to give opium by the mouth in quantity sufficient to ease from pain, and prevent evacuation for the time, and to make use of the first injection while the patient was in some degree under the influence of the opium taken. This injection might be retained for several hours, and if care were taken to repeat the injection *immediately* after each evacuation, (not giving time for the second,) these would become less and less frequent, and be attended with less and less of pain, and when the evacuations were not more frequent than once in four or six hours, they would contain some fecal matter, often more than could have been procured by a cathartic, and the patient, in a week or ten days, would be free from fever and pain, and his evacuations would be natural or nearly so. But in some cases, a regular use of opium every two, four or six hours, was necessary to ensure the retention of the injections. I made use of little medicine beside opium, but in cases of apparent exhaustion in the course of disease, and in some of the most asthenic cases, from the commencement I prescribed a moderate use of brandy or

spirits in warm sling, and am confident that I made use of no cathartic or laxative.

The number of my patients in this epidemic treated in this way, I have not ascertained, but believe it not less than from twenty to thirty. They all recovered. Although since 1801 dysentery can hardly be said to have been epidemic in any one year, there have been few years in which I have not had some dysenteric patients, all of which I have treated, in general, on the plan last adopted in the epidemic described. I have very seldom, indeed, made use of any cathartic or even laxatives, and believe never with any sensible, ultimate good effect.

In September, 1834, I lost two dysenteric patients, both children. One of these, four or five years old, in the course of dysentery, voided many worms, and in eight or ten days dysenteric complaints had subsided, and the bowels had become nearly regular, when the patient was attacked with spasms and diarrhea. Believing that worms were the cause of these, I prescribed spigelia, calomel and oil. The child expelled several more worms, but the spasms continued with return of tenesmus, and the child died on the next day.

The other patient, two or three years old, was at first affected with spasms, succeeded by diarrhea, the evacuations soon becoming dysenteric. For two or three days the patient appeared to be doing well, in this time voiding several worms; was then affected with spasms, took spigelia, calomel and oil, and voided several more worms, but with increased tenesmus and continuance of spasms; the child died in a few hours.

Although worms may have been the immediate cause of death in both of these cases, there was an increase of tenesmus in one, and a return of it in the other, as I suppose, from the use of physic. These are the only dysenteric patients which I have lost since I changed my practice in the epidemic in 1801, and have *never* lost one, unless some cathartic had been used, with the single exception in the case of 1801, already related, in which no physic was given, nor was opium used as directed. I have seldom seen a dysentery succeeded by diarrhea in my practice. When it has occurred I have found no difficulty in overcoming it by opium and acetate of lead, with tonics; but have seen several cases in which, when the patients had been sick a week or ten days, all evacuation from the bowels was, by the opium, prevented for several days, when the patients would have a free and natural evacuation, without pain, the bowels from that time continuing regular.

To this account of my treatment of this disease, I have only to add, that for the last fifteen or twenty years, I have made use of the tincture and infusion of capsicum, seldom, however, in the commencement of the disease, unless in some of the most asthenic cases, but in the course of disease, when there was great exhaustion, I have used it, I think, advantageously; but more especially has it been useful in cases of longer continuance, when the patient is much exhausted with frequent *mucus* discharges, and tenderness

of bowels. This tenderness of bowels, commencing late in the disease, I think I have seen lessened by the use of this medicine.

In the spring and summer of 1804, there were many cases of fever, mostly among children, in some respects differing from any I had before seen. These commenced suddenly with severe pain across the forehead; the patients were remarkably sensible to light and to sounds; the pulse from 120 to 140 in the minute, small and rather sharp than hard; the skin was very hot and face flushed, and in some cases there was, at times, apparently, a commencing rashy eruption on some part of the face, or on the breast, or ears, lasting, however, only for a few minutes at a time. The tongue, in the very commencement, was covered with a very thin, and very white fur. After two or three days, the pulse would, suddenly, become less frequent, counting not more than sixty or fifty or even forty-five in the minute, but be regular. The patient would now be more cool and free from pain in the head, but in this state there was in some cases torpor of bowels and of urinary bladder, this becoming distended without giving pain, and the patient without inclination or power to expel it readily. Some patients, in this state, would be at times affected with severe pain in the bowels or limbs, but more of them with a distressing sensation of suffocation, as if induced by compression of the trachea, immediately above the sternum; and many complained at times of a distressing pain in the angle formed by the junction of the clavicle with the scapula, and this commonly, if not invariably, in the right side. In the commencement of these cases I procured some evacuation from the bowels, directed wetting the head with cold water, and exposing the patient to cool air. When the patients became cool, and the pulse unfrequent, I commenced the use of some of the diffusible stimuli, and in the cases of torpor of bowels, or of the urinary bladder, made use of spirits, tincture of guaiac, tincture of lytta, mustard seed, blisters or sinapisms. An evacuation of urine might sometimes be procured by the sudden application of heat or of cold to the region of the pubes, at the instant of the patient's attempting to expel it. The pain in the bowels or limbs might be removed by the use of laudanum with hot sling, and the distressing sensation of suffocation almost instantaneously, by the same means, or by essence of peppermint, by aqua ammonia, or by camphor, or by any thing that would make a strong and sensible impression on the fauces, but were to be prevented, only by a regular use of opium and cinchona with spirits. Most of these patients recovered in the course of a week or ten days, with a moderate use of these remedies; but some few continued sick for several weeks, requiring a more free use of these medicines, particularly of opium. No one of these patients died.

SCARLATINA.

These fevers of 1804 which discovered great irritability of the nervous system in their commencement, and were evidently typhoid, were succeeded in the spring of 1805, by scarlatina, which prevailed as an epidemic.

Under the term *scarlatina*, I would be understood to include Cullen's *scarlatina*, *scarlatina anginosa* and *angina maligna*, believing they are but different forms of the same disease, and that this is always asthenic, never prevailing as an epidemic, but during a general asthenic diathesis; but that yet, as this is a contagious disease, it may be communicated to one not strongly disposed to asthenic fever, and thus a case may be produced of the mildest form in the midst of a malignant epidemic, which like other mild cases, might be safely trusted to nature, needing neither reducing agent to lessen excitement, nor stimulants nor tonics for the purpose of raising it, which in these cases might prove only irritants. All such cases I have considered as needing very little medication, unless, in the course of the disease, some laxative should become necessary to lessen irritation, as when the patient becomes restless, with a small, sharp and more frequent pulse, with increase of heat, or when the pulse becomes more frequent and small, and soft, with diminished heat, and the patient perhaps drowsy, now requiring, as in other malignant cases, the use of various stimulants or tonics.

Having made these remarks on the treatment of the milder cases, what I shall further say respecting the treatment of this disease, will relate only to those more malignant.

In all of these cases the pulse was very frequent, in some cases small, quick and sharp, with much febrile heat in the commencement; but in others more soft and weak, with less heat, and the patient sometimes drowsy. The inflammation which in this disease is commonly mostly confined to the throat, in many cases extended to all parts of the mouth, internal nares and meatus auditorium, and these parts, as well as the mouth, were filled with canker, which, on sloughing, left deep corroding ulcers, and in one case caused deafness. Some of the few blisters drawn were also filled with canker, and were very injurious, tending to exhaust the patient by their irritation. In some cases the throat was much swollen, causing difficulty in deglutition and in respiration. In some there was diarrhea in the commencement; in some others this commenced in the course of disease.

In the treatment of these cases I was careful not to reduce my patients by evacuations from the stomach or bowels, and procured none but with the lightest means, and only for the purpose of lessening irritation in the cases of much febrile heat; nor did I make use of any antiphlogistic remedies for the purpose of lessening excitement, but endeavored to support my patients from the commencement, by making use of some of the diffusible stimuli, as aqua ammonia or camphor, or weak, warm sling, using also an infusion of *serpentaria*, continuing this through the course of the disease, or in the more sunken and malignant cases substituting a decoction of bark. I also prescribed laudanum, when this was necessary to procure rest or restrain diarrhea, in the commencement or course of disease, when apparently exhausting the patient. I was also careful that the patient should have fresh air, and if there was much heat, that the room should be kept cool. All

other cases, though less malignant, I considered as asthenic, and (excepting those too light to need medication,) I treated as such, adapting my remedies to the degree of disease. I also made use of various astringent and detergent gargles, but with little sensible good effect, beside cleansing the mouth and throat from acrid and offensive matter.

In the course of the last thirty years, this disease has, at several different times, been epidemic, but at no time so prevalent nor malignant as in 1805. In the treatment of these cases it is only necessary to say, that I have continued my former practice, in general, but have made a more free use of opium as a stimulant, and for the last fifteen or twenty years, have made much use of the infusion of capsicum, and believe it one of the best of stimulants to produce reaction in the commencement of some of the most sunken cases, and in cases of sudden and great exhaustion in the course of the disease, and have found it particularly useful in some cases in which the throat was much swollen and filled with canker, or when the fauces were of a dark color and painful, and have known it arrest the progress of inflammation in its commencement, when it has been diffused and of an erysipelatous appearance. In some of these cases, the infusion, so far from increasing the pain in the throat, would make no sensible nor useful impression, unless given while hot or with spirits. My patients have been remarkably free from that general edematous swelling of the body so frequently affecting those who have recently recovered from this disease, and believe that no case of this kind has occurred requiring any special attention, or for which I have made any prescription, but that of some common diuretics, with the continual use of tonics.

But on the 1st of May, 1805, I saw a child which I had attended in a light case of this disease, requiring but little medication, making my last visit on the 14th of March. The child now, after having been, as was said, well for about six weeks, had but little pyrexia and appeared but slightly indisposed; I directed a laxative only. On the third day after I was called to visit it. It was now comatose, cold and nearly pulseless, with petechiæ on most parts of the body; there was an involuntary bloody discharge from the bowels, and an oozing of a bloody fluid from the mouth, nose and eyes. On the next day the child died.

In the evening of the 22d of February, 1835, I visited a female aged about thirty. She had complained of soreness of throat for a day or two, her pulse was now very frequent and sharp; her skin was hot and covered with a rashy eruption. At this time she was puking with an infusion of *eupatorium perfoliatum* which she had taken. She was inclined to take no medicine through the night, and I prescribed none, but she continued to puke and also purged. On the 23d, without any sensible change in the state of the pulse, she was unable to swallow or attempt to swallow any thing, without causing most distressing efforts to puke. I could get neither a pill of opium nor a dose of laudanum into the stomach, nor could opium be used in any other way. She was disinclined to take any

medicine, food or drink, and swallowed nothing on this day nor the next. On the 25th the pulse was less frequent, eruption had disappeared, and she was more comfortable, and in the course of the day swallowed and retained a few teaspoonfuls of broth. On the 26th she was more comfortable, and took very little broth, but was unwilling to take medicine, and took none. In the evening, with but little help, she for the first time got up from bed, sat for fifteen or twenty minutes, with but little help got into bed and immediately expired. This patient, who, (with the exception of the emetic, which she took without advice,) died without medication, is the only one that I have ever lost in this disease. But one child which died in 1794, which case has been noticed, I believe would have died *my* patient, if it had not gone into the hands of a root doctor.

As indicating the commencement of an asthenic diathesis, notice has been taken of fevers preceding and accompanying scarlatina and dysentery; but to give a more connected account of typhoid pneumonia, that of all other febrile diseases since the year 1805 has been omitted. From that time to the present, fevers have appeared in various forms, not only in different years, but have occurred at the same time in such forms as might have been distinguished by different appellations; but as they all agreed in the same general character, typhoid, requiring the same general treatment, I shall comprise, under the general term typhus, all idiopathic fevers, unaccompanied with local inflammation, which have occurred in my practice for the last thirty-two years, distinguishing more particularly those cases only which I conceived required some difference in treatment.

Through the spring, summer and fall of 1806, fevers were very prevalent. In most of these cases, the patients, after some days of predisposition, indicated by want of appetite, slight headache or pain in the back or limbs, sense of fatigue and restless nights, would be affected with some slight chills, soon succeeded with moderate heat, and increase of pain in the head, or a confused state of mind. The pulse, now, seldom less but often more than 120 in the minute, and always small; the tongue being commonly soft and moist, covered with a thin, white fur, and seldom becoming dry and hard in the course of disease. But in some cases, the patients, without any previous symptoms of predisposition, would be very suddenly attacked with pain in the head, or dizziness and imperfect vision, accompanied, sometimes, with slight nausea. In these cases there commonly arose more heat, than in those preceded with symptoms of predisposition; and some few of these patients were somewhat drowsy in the commencement of disease, but in general the patients were watchful through its whole course.

There were mild cases of typhus, the treatment of which I commenced, if there were much heat and nausea, with an emetic of ipecac, or if there were no nausea, by evacuating the bowels with calomel and Dover's powder, or other mild cathartic. For several of the succeeding days, making use of opium combined

with ipecac, or if there were much heat, with calomel or some antimonial, omitting the calomel or antimonials immediately on the lessening of heat or the softening of the pulse, continuing a moderate use of opium and other diffusible stimulants and infusion of serpentaria, or in cases of more debility, decoction of cinchona, for the several last days of the first week.

In most of these cases, about the close of the first week, there would be an abatement of disease, and the patient, with little or no increase of means of support, would recover in about another week. But in some cases, when, as I conceived, there had been too much evacuation, or calomel or antimonials had been too long or too freely used, or sufficient support in the latter part of the first week had not been given, the patients would, in the commencement of the second week, be in a state of muttering delirium, with more or less of subsultus, and very watchful, the pulse having become smaller and more frequent. In this state of my patients, I made use of stimulants and tonics much more freely.

On the 13th of July, I visited a man aged about twenty-five. His fever had commenced with slight rigors; he complained of pain in the head, and of some nausea, his pulse was frequent and his skin hot. I gave an emetic in the evening, and directed an opiate after its operation. On the second day, directed calomel in small doses with opium and infusion of serpentaria. This practice was continued through the first week. On the eighth day, I found the pulse more frequent, and the patient watchful and delirious. From this time he took daily six or eight grains of opium, from half an ounce to an ounce of bark in decoction, and about a half pint of spirits, until about the close of the second week, when the fever subsided, the patient became rational and soon recovered with a moderate use of tonics.

On the 30th of October, in the evening, I visited a man aged about thirty, who had been suddenly affected with dizziness and blindness, from which he had nearly recovered, but said his mind was confused, and complained of some nausea. His pulse was small and frequent, with little febrile heat. I gave a light emetic and directed an opiate after its operation. On the second day there was more heat, and I directed opium, with tartar of antimony. From the third to the eighth day, he took opium, and was in the use of infusion of serpentaria, when I found the pulse more frequent, the patient delirious, much affected with subsultus and very wakeful. For two or three days he took daily from eight to twelve grains of opium, of bark, in decoction, from a half ounce to an ounce, and about one pint of spirits, and in the course of this time, had taken several doses of musk, each of about ten grains, and had continued in nearly the same state; but now, on visiting him on a morning, I found him more delirious, and his pulse more frequent, and directed an increase of all his medicines, and at night, perceiving no sensible change, I directed a still further increase of medicine. On the next morning found my patient fast sinking, and supposing him insensible to medicine, despaired of his recovery; but the nurse, (who was a new one,)

now told me that for the last thirty-six hours she had given only about one-half of the quantity of medicine that I had directed, at the commencement of this week, but would now follow directions. The use of medicines as at first directed, was now resumed. In the course of a few days the fever subsided, the patient became rational, and soon recovered with a moderate use of tonics.

Notwithstanding the difficulty of procuring sleep by opium in these cases, it was effectually and beneficially done in the case of a colored female, in the care of an ignorant nurse, in the month of April. The patient having been in the second week of fever, delirious and long without sleep, I left, at night, a number of good sized pills of opium, with directions that one should be given every hour until the patient should become *sleepy*. The next morning the nurse told me the pills had not operated, but that she gave them hourly as long as she could get them down. I however found the patient in a profound sleep, with a pulse more full and less frequent. She continued to sleep most of the time for twenty-four hours, from which time she was more rational, and eventually recovered.

In the course of this year the number of my patients with typhus, I believe could not have been less than from sixty to eighty, one only of which died.

On the 31st of March, I visited a young man who complained of an excruciating pain in one side of the chest, and was in great haste to be bled. Although he had but little pyrexia, and no cough, by the severity of pain was induced to bleed him. The pain was not removed by the bleeding, and I directed an emetic and epispastic. The next morning, as the pain still continued, although not so severe, I made another small bleeding. On the next morning he was free from fever and from pain, but in the afternoon was affected with delirium tremens. One pill of opium was all the medicine that could be got into his stomach, and he died in two or three days. This patient was the only one that was bled, and I have since learned that these most excruciating pains, in the commencement of typhus, when accompanied with but little heat, and with a weak or soft pulse, may be removed with certainty, by a free use, for a time, of diffusible and acrid stimulants, opium, spirits and capsicum, the last article being sometimes necessary to render the stomach sensible to any impression from the others.

In the next four succeeding years, 1807 '8 '9 and '10, fevers like those of 1806 were still prevalent, and among them were some few cases much more malignant. In the evening of the 8th of February, 1809, a child two or three years old, while very playful, complained, at several times, of severe but momentary pain in one finger. The child became sleepy and was put in bed, and was supposed to be well. After several hours of sleep, it awakened, made efforts to puke and again fell into a sleep from which it could not be awakened. Petechiæ were soon discovered on its breast; about two hours later I saw the child; it was cold, senseless and pulseless; its feet were of a purple color, and

its body was very much covered with petechiæ. Nothing could be got into the stomach, nor could the sensible contraction of a single muscular fibre, for voluntary motion, be produced. The child soon died without medication.

On the 23d of March, 1810, I visited a male, aged about fifty, in the commencement of fever, with some lung affection. He was purged and blistered, and on the second day was bled, and on this and the third made use of some nitrous medicines; on the fourth commenced the use of bark and opium. Through the second week was in a low typhus state; continued the use of bark and opium perhaps too sparingly. He died on the 1st of April, on about the fourteenth of disease.

I lost one other patient in 1807, a lad eight or ten years of age, in a relapse induced by a surfeit while in a state of convalescence.

I have not ascertained that I lost any other patients by these fevers in these four years, but I probably did.

Fevers were very prevalent and more asthenic in 1811; many cases commencing very suddenly with faintness or epigastric sinking, requiring an immediate and free use of diffusible and acrid stimulants, until reaction was produced, heat restored, and this distressing sensation was for the time removed. By a continued, but more moderate use of the same remedies, together with a free use of cinchona, the patient would often be convalescing at the close of the first week, and sometimes earlier. But in other cases the fever would continue for two or three weeks, with little febrile heat, the patient being often affected with epigastric sinkings, unless constantly well supported by cinchona, opium, spirits, and capsicum. As these would, almost with certainty, be induced by every evacuation from the bowels, neither cathartics nor laxatives could be used at any time in the course of the disease but with decided bad effects; I therefore made use of no means to procure an alvine evacuation during the continuance of disease, whether this were one or two weeks, or longer, unless the patient complained of an inclination for an evacuation, without ability to effect it, (an instance of which I have seldom seen.) In this case the evacuation was most safely procured by an injection, the patient taking at the time an extra dose of opium with spirits, or infusion of capsicum.

There were many other cases of fever in this year like those of former years; but there was an unusual proportion of cases commencing with vertigo and affection of vision, and in many cases, at or near the close of the first week, the pulse would suddenly become preternaturally slow and infrequent, the patient becoming more comfortable. This state of fever required no increase in the use of stimulants, but less opium and more of the acrid stimulants. Torpor of the bowels or of the urinary bladder was also more frequent, requiring the use of tinct. guaiac., tinct. lyttæ, epispaties, and infusion of capsicum. There may have been some deaths, but in the course of this year none has been ascertained.

Fevers which were very frequent in the years 1812, '13, and '14, were, like those of 1811, highly asthenic, bore evacuations as poorly in the commencement, and some cases required much support in an advanced stage of disease; but the cases commencing with epigastric sinking were not in so great proportion as in that year.

On the 7th of November, 1812, I visited a man aged about twenty-five, who had been indisposed for several days, and had taken a cathartic. He had now much pyrexia, and I prescribed antimonial in small doses; but on the second or third day, he was using serpentaria and opium, and I believe some spirits. On about the eighth day, the pulse became smaller and more frequent, and the patient was in a state of low, muttering delirium, with subsultus. Bark was now prescribed, with more opium and spirits. This course was continued until about the close of the second week, when a laxative was given, which operated quite moderately, but exhausted the patient. When he had been supposed dying for several hours, I found him cold and nearly senseless, with a pulse very frequent and scarcely perceptible. In the course of the next twenty-four hours, he took at least twelve grains of opium, a half ounce or more of bark in decoction, and nearly a pint of spirits. He gradually became warmer, with a pulse more full and less frequent. The same medicines were continued in nearly the same quantity for about two weeks longer, when the patient was convalescing with the use of little medicine.

In this case, in the course of the third week, the patient had a second sinking turn; a watcher, by way of experiment, having omitted all medicine for four hours. From this he was again raised by the former medicines for a time more sedulously used.

This case has been selected and thus particularly related, not as a specimen of the best practice in every particular, but as showing the necessity of support and danger from evacuations near the close of the first week, or near the approach of any other critical period, and the quantity of stimulants and tonics necessary in an advanced stage of some of these cases.

For the purpose of further showing, negatively, the necessity of such support in these cases, the following is adduced:

On the 26th of December, 1812, I visited a female aged about seventeen. She was only moderately sick. I puked her with ipecac, and directed a moderate use of opium and of spirits. In the course of the first week, her pulse became preternaturally slow, and she was comfortable; but, at the close of the week, she was affected with epigastric sinkings. These were suppressed by a more free use of spirits, opium, and bark; but by a new nurse these were used in much smaller doses, and, at the close of the week, a severe case of sinking occurred, when I found the nurse (who supposed the patient was dying, and unable to swallow,) wetting the mouth of the patient occasionally with weak sling. I turned into the mouth of my patient a tablespoonful of brandy, with a small dose of laudanum, which was swallowed. This dose I repeated a few times, and in the course of one hour my patient

was again comfortable. I then directed a more free use of the medicines, not doubting the recovery of the patient; but my directions were not followed, and the patient, in a day or two, died, as I believe, by neglect of the nurse.

This is the only patient I have ever lost in any case of fever in which the pulse became preternaturally slow.

I have ascertained the death of only two patients besides this in 1812, '13, and '14, but there may have been others.

From the time that typhoid pneumonia commenced as an epidemic in 1815, to the close of the year 1816, typhus was less prevalent, and I believe no case proved fatal.

From Jan. 1st, 1817, to Jan. 1st, 1822, typhus was much more prevalent; but during this time I lost only one patient with fever. A child which I visited on the 14th of August, 1818, had been sick but a short time, was comatose, much covered with petechiæ, and died on the next day.

In 1822, fevers were decidedly less asthenic than they had been for many years. Of forty or fifty patients which, from the 26th of July to the 9th of November fell under my care, I bled six, and one of these three times; but these bleedings were sparingly made. These patients bore moderate evacuations from the bowels in the commencement better than those of the former years, but more or less use of stimulants and tonics commonly became necessary in the course of the first week. No case proved fatal during this year.

In 1823, fevers were more prevalent and more asthenic, but I bled and purged one who recovered; but the case was a protracted one of four or five weeks.

One case only proved fatal; a female, aged about seventy-five, died on the 23d of June, after a sickness of about three weeks.

In 1824, fevers were also prevalent, and were alike asthenic. Of these patients I lost two.

One of these, a male, aged about fifty, having so far recovered from a fever of two weeks continuance, that he rode in one day thirty miles, and a part of this distance in rain, was again attacked with fever, and died in about ten days, on the 14th of October.

The other, a male, aged about twenty-one, I visited on the 30th of October. He had had, for several days, a diarrhea, and had taken two doses of cathartic salts, by each of which he had been very drastically purged. On the 15th of November he had a profuse hemorrhage from the bowels, and died on the 19th.

In the years 1825, '6, '7, and '8, fevers continued to be very prevalent, many of which, and some of the worst cases, were in the winter.

In 1825, I lost two patients with fever. One, a female, aged four or five years, died on the 24th of March; and the other, a female, aged about eighty. Her sickness commenced with diarrhea, about the 20th of July. After about two weeks she was convalescing, but the diarrhea returned, and she died on the 19th of August.

In 1826, I lost two patients. One of these was a male, aged about twenty-five. His sickness commenced with diarrhea, about the 20th of July, and he had taken a cathartic previous to my seeing him. He died on the 9th of August.

The other was a male, aged about twenty-five, whom I first saw on the evening of the 17th of September. He had been, for about a week previous, somewhat unwell, in which time he had been once excessively fatigued, had been once freely purged with Lee's pills, and again by cathartic salts. He was now delirious, had severe transitory pain in the bowels, and spasmodic affection of limbs; he was cold, sweating profusely, and his pulse was very weak and very frequent.

With a free use of opium, spirits, infusion of capsicum, and decoction of bark, in two or three days the pulse had become more full and less frequent, and he was only slightly delirious. In this state he continued through the first week, without any evacuation from the bowels, when, by an injection, against the use of which I had remonstrated, a single evacuation was produced of a perfectly natural appearance. In the course of a very few minutes, the patient was pale and cold, with an extremely rapid pulse, and was very delirious. By means of opium, spirits, and capsicum, in the course of an hour or two heat was restored, the pulse became somewhat more full and less frequent, but continued rapid until the 27th, when the patient died, on the eleventh day of my attendance, and about the fourteenth of fever.

Fevers were very common in the years 1827 and '28, and among these were more cases than usual of low or cold typhus commencing suddenly with loss of strength, faintness, or nausea, the skin being much colder than in health, and the pulse small and frequent; and in some of these cases there was tenderness of bowels, and efforts to puke from motion or from swallowing.

By a free use of diffusible and acrid stimulants, with external application of heat, or of sinapisms, the pulse would become more full and less frequent, the skin gradually warmer, the patient more comfortable, and commonly convalescing after the first week, during this time having had no evacuation from the bowels.

In some of these cases, opium appeared to have little or no effect, unless the stomach was previously warmed by the use of capsicum.

I have never lost a patient with this form of fever.

I have been consulted in two cases of this form of fever, which had been under a different mode of treatment. A female, aged about thirty, I first saw on the 14th of September, 1827. She had been sick about two weeks. On her first indisposition, she took a dose of jalap, without advice, and was immediately confined to her bed, and mostly to a horizontal posture; could neither be raised nor turned, nor could she swallow any thing, but in very small quantity, without retching to puke, occasionally ejecting a small quantity of mucus, of a blueish or green color. She also occasionally voided the same appearing fluid from the bowels, which were tender and sometimes painful, but not tumid.

Her pulse was small and frequent, and there was very little febrile heat, and most of the time the temperature of the skin had been much below that in health.

Stimulants and tonics had been little used, but opium had been administered to restrain the evacuations, but without any sensible effect. Calomel had been used in small doses to change the secretions. She had also taken a small dose of ipecac, the day previous to my seeing her, by which some evacuation was made from the bowels, and she was very much exhausted.

She now took, in the course of about one hour, about a half gill of spirits in hot sling, and the same quantity of infusion of capsicum, while hot, which were retained. All inclination to puke, and a distressing sensation at the stomach, which had been constant, were removed; the bowels were also free from pain and from tenderness. In this more comfortable state she continued for four days without puking, with the use of about a half pint of spirits, a half pint of infusion of capsicum, about six grains of opium, and six grains sulph. quinine, when on the 18th an injection was used; she was sunken, and all her former complaints returned. I saw her again on the 19th, 20th, and 22d. She continued, during this time, the former medicines somewhat more freely, with the addition of decoction of bark; and in the forty-four hours preceding my last visit on the 24th, she had taken one quart of brandy, probably one half that quantity of infusion of capsicum, eight or ten grains of opium, as much sulph. quin. and some decoction of bark; was now sitting up in her chair, had acquired some appetite for food, and from this time continued to convalesce under a more moderate use of the same remedies. On the thirteenth day from the use of the injection, the patient had her first evacuation from the bowels, which was free, and in all respects natural.

It is worthy of remark, that with this very free use of spirits and of opium, there was not the least sensible narcotic effect from either, and this on a patient who in health had never made any use of spirits.

The other of these patients was also a female, aged about thirty, whom I visited on the 25th of September, 1827. She had been sick about a week or ten days.

This case was too much like the other to need particular description; but her complaints were by no means so severe, nor was she so much exhausted, but she had some little difficulty in breathing, and pain in the head; she had also been treated in nearly the same manner. In the course of one hour, she now took a half gill of spirits in hot sling, and several doses of tinct. of capsicum. All inclination to puke, a distressing sensation at the stomach, which had been constant, difficulty in breathing, and pain in the head, were removed.

One tablespoonful of spirits in hot sling every two hours, and fifteen or twenty drops of alcoholic tincture of capsicum every two hours, alternately taken, with the exception of one pill of opium, were all the medicines afterwards used; but these were

continued until the patient was well. On the eighth day there was the first evacuation from the bowels, which was natural.

In 1827, I lost only one patient with fever, a female, aged about sixteen. I visited her first on the 28th of August. She died on the 11th of September.

In 1828, I lost but two patients with fever. One of these was a child about five years of age, which I first visited on the 21st of March. It had been sick about one week, and had taken two doses of cathartic salts, which had operated freely. It died with diarrhea on the 23th.

The other was a female, aged about thirty, whom I first visited on the 12th of September. She had been sick about one week, during which time she had kept up a constant catharsis with cathartic salts and aloes. She was much exhausted, and was having frequent and copious liquid evacuations from the bowels which I was able only partially to suppress, and she died with diarrhea and tumid bowels on the 21st, and about the fifteenth of fever.

For the last eight years, from the 1st of January, 1829, to Feb. 1837, fevers have been much less frequent than for many years previous, and in the year 1835 there were very few cases. During this time fevers were also, in general, less asthenic, more particularly in the year 1834; the patients in this year bearing, and in some instances requiring more evacuation from the bowels than in former years, and requiring less support in the progress of disease.

In these eight years I lost only one patient with fever. This patient, a female, aged eighteen, I first visited on the 11th of September, 1836. She had been much unwell for about a week, during which time she had had very restless nights, and had complained of constant noise in the head, and for several weeks previous had at times had some diarrhea. Her pulse was weak, but not *very* frequent, and she had little febrile heat. I considered the patient in a state of predisposition to, rather than in the actual state of fever, and, considering her *previous* state of bowels, was induced to give her, at night, two or three grains of calomel with Dover's powder. This, contrary to my intention, operated two or three times, her pulse became smaller and more frequent, and she was somewhat delirious. I was unable to obtain control of the bowels as I wished, and she died on the seventh day from my first visiting her, and, as I believe, on about the fourteenth of fever.

In my account of fevers from 1805 to Jan. 1st, 1817, I have noticed only a few deaths, not supposing I have noticed the whole number. But from the 10th of March, 1816, to the present time, (Feb. 1837,) it has been my intention to ascertain the number of deaths, and have made a list of only twelve fatal cases, which I confidently believe is the whole number. Seven of these have been related. Of the twelve patients who died, one was a child, which died on the second or third day with petechiæ fever. One died of a relapse, induced by excessive fatigue and riding in rain. One had excessive diarrhea, took two doses of cathartic salts

without advice, and had hemorrhage from the bowels. One was eighty years of age, the disease commencing with diarrhea. One was much fatigued in the commencement, was twice drastically purged before I saw him, and injudiciously used an injection in the course of disease. One was a child, which was twice purged with cathartic salts in the first week of disease, with no other medication. One kept up a constant catharsis through the first week (without advice,) by cathartic salts and aloes. The other five were perhaps under as favorable circumstances for recovery as many others who did recover.

The number of my patients with typhus in these last twenty-one years cannot now be ascertained nor computed with any good degree of accuracy; but as under this term I would be understood to include all fevers which have occurred in my practice which were unaccompanied with local inflammation, and as most of the time of the first fourteen years was remarkably sickly, and also some part of the last seven, I am of opinion that the number cannot fall much short of one thousand.

Among these cases may have been many which by some would not have been considered typhoid; but I believe that I have in this time treated no case of continued fever, through its whole course, on a plan which could be considered strictly antiphlogistic, although there were many in which evacuations were made, not only in the commencement, but later in the disease, but generally more for the purpose of removing irritation than for reducing excitement; in some of which cases very little medicine was afterwards used. These patients I believe might have recovered under a light and inefficient stimulant, or antiphlogistic treatment, and perhaps as well without either, and of course are not cases on which to found an opinion of the propriety or impropriety of any mode of practice that is much more efficient than these cases required. It is only in the more dangerous and fatal diseases, or in a dangerous *state* of diseases of less fatal tendency, that the happy effects of an efficient practice are evident. That such cases require an efficient practice, all will admit. It must also be admitted that these cases furnish the best opportunity for judging not only of the propriety or impropriety of any efficient means of cure that may be adopted, but also of the character of the disease.

During a general asthenic diathesis, I have thought that various membranous inflammations were more common than at other times, and that there are then asthenic.

In the years 1825 '6, and '7, there were many cases of erysipelas, in which the pulse was small and very frequent, or full and soft; in some of which cases the patients were delirious in the commencement of disease. These cases I treated successfully with bark, spirits, and opium.

Some cases of typhus commenced with severe rheumatic pains. In these, after making some evacuation from the bowels with calomel and Dover's powder, I have made use of spirits, infusion or tincture of capsicum, and of opium combined with ipecac, or with

tincture of *actea*, or of *sanguinaria*, for some of the first days, or until there was some remission of fever with sweating, and some alleviation of pain, when I have commenced the use of bark or of sulph. quinine, continuing that of spirits and of capsicum, making use of opium alone, or combined with Fowler's solution, in such doses as were found necessary to control the pain, in a great measure.

With this treatment, all recovered in the ordinary time of typhus.

I have seen two young persons thus affected, which, under a moderate antiphlogistic treatment, died; one, I believe, in the year 1814, and one only a few years since. And on Jan. 19th, 1825, I visited, in consultation, a young man, who had been affected with rheumatic pains for a week or ten days. He had taken a cathartic, and early in the disease had been sparingly bled and fainted. In two or three days after, his pulse becoming remarkably full, and, as was said, hard, he was more freely bled. The blood drawn was said to have been uncommonly black, exhibiting, on cooling, a buff of very uncommon thickness, which was separated with great ease; the pulse then became small and more frequent. On the day previous to my visiting him, petechiæ appeared on various parts of the body, and now the skin on most of the forehead, on one temple, over the pubes, groins, and nates, the whole of the scrotum, and most of the penis, on the inside of one thigh, and on part of the calf of one leg, was sphacelated; the skin surrounding the sphacelated parts, for a small distance, was of a light pink color. The patient was without sleep and was delirious.

In the course of the next twenty-four hours, he took from ten to twelve grains of opium, one-third of a grain of arsenic, ten or twelve grains of sulph. quinine, some decoction of bark, and one quart of spirits. On the next day his pulse was more full and less frequent; he had had but little sleep, but was more rational; sphacelation was arrested, and the pink color of the skin had disappeared. With the omission of the arsenic, and some reduction of the quantity of spirits, (about one half,) this treatment was continued until the dead skin, together with the subjacent cellular membrane, sloughed off, and granulations of flesh appeared, when, by the obtrusive interference of a physician, more despised for his quackery than esteemed for his virtues, by his medical brethren, one half of the opium was exchanged for ext. stramon. and the quantity of bark and spirits was reduced. The patient became much more delirious, the secretion sanious, and in a few days the patient died.

Two other cases of this character, treated more or less on an antiphlogistic plan, I have more lately seen, which terminated fatally after five or six weeks continuance.

MEASLES.

Measles, in the early part of my practice, was a highly sthenic disease, which I treated on a free antiphlogestic plan. And since,

while other febrile diseases were in general, asthenic, this has so far sustained its common sthenic character, that in most cases, little medication has appeared necessary, most patients requiring very little more than exposure to cool air, and abstinence from hot and stimulating drinks. I have directed such patients as were able, to keep the open air, and have known many able to do this through the whole course of disease; and have never known the eruption repelled, or the patient injured by exposure to cold air or by washing with cold water, neither previous to, nor during the eruption; but by these means the patient has been much relieved when febrile heat had been much increased, and pain induced by heat or other stimulants.

Those patients which have had the most febrile heat and the fullest eruption, have, more commonly, at the time of crisis, been affected with puking and purging, or have needed the use of cathartics soon after, to remove the continuance of a febrile state; also, with hoarseness and cough to which they are peculiarly liable. In this state of the lungs, cold air is injurious; and narcotics, with perhaps, a mild antiplogistic treatment, are decidedly useful.

Those patients which have had the least eruption and of course, less fever, have, commonly, had the most speedy and most perfect recovery.

From this history of febrile diseases, it would appear that in my practice they were in general sthenic from 1789 to 1799. That from that time to 1806, febrile diseases were more of an asthenic character; and that from 1806 to 1830, with perhaps the exception of some cases in 1822, they were not only decidedly asthenic, but in general highly so. That from 1829 to the present time, they have been of the same character, but in general not so highly asthenic. So that it may be said that, within the limits of my practice, there has been a general asthenic diathesis prevailing from the year 1805 to the present time, 1837.

Typhoid fevers have a strong tendency to a crisis on the seventh day; and when a crisis does not take place at that time, a favorable one will not until the fourteenth or twenty-first day; and during the continuance of fevers, every seventh day will be marked by some change in the state of the patient.

A most favorable crisis is marked only by a subsiding of febrile heat, the pulse becoming less frequent, more free, and natural, the patient becoming free from every uneasy sensation, without purging, and with little sweating, and recovering under a moderate use of tonics necessary to prevent a relapse.

But when, on a critical day, the crisis is only partial, the patient becoming only more comfortable, with a less frequent pulse, which has lost nothing of its strength, if the same unremitted use of tonics and stimulants be continued, a favorable crisis may be expected on the next critical day.

But if on the contrary, the patient at the end of the first or second week, becomes more restless, and watchful, or delirious, with a smaller and more frequent pulse, or comatose, with a pulse

not less frequent but weaker, or less frequent and more full, if *very* soft, the patient will probably fail on the next critical day, without a more free use of tonics and stimulants, especially of opium.

If an effort for a crisis be accompanied with diarrhea or profuse sweating, although the patient may feel relief at the time, the pulse will soon become smaller and much more frequent, the patient perhaps delirious, and unless well supported by a more free use of tonics and stimulants, will probably die, if not at this juncture, on the next critical day.

In all cases commencing with much diarrhea, its continuance is to be prevented by the use of opium by the mouth and by way of injection; and if these prove not effectual, the use of a few doses of acetate of lead. If this diarrhea cannot be entirely suppressed, the bowels will become tumid in the course of disease, with an increase of diarrhea, and the patient will probably fail. But although the bowels are much tumid, if the diarrhea be effectually stopped and no evacuation from the bowels be allowed, the tumefaction will gradually subside and the patient, if well supported, will probably recover, having passed one or two weeks, or longer, without any evacuation from the bowels, and without uneasiness from the want of it. In recommending this course in these cases, I speak advisedly, having tested its salutary effects in very many cases.

Those patients who have been drastically purged in the commencement, or have been more moderately but repeatedly purged in the course of the first and second week, are disposed to diarrhea at the close of the second or third, with tumid bowels, requiring then the same treatment as if the disease had commenced with diarrhea. To prevent this accession of diarrhea, an early and more free use of tonics and of opium is necessary, than under other circumstances the symptoms would appear to indicate.

In all cases of epigastric sinking, and those in which the temperature of the skin is much below that in health, whether the patient be inclined to puke on motion or on deglutition or not, or has pain or tenderness of bowels or not, all evacuations from the bowels are to be avoided. These cases require a free use of stimulants, more particularly acrid stimulants, without which tonics and opium in some cases, will have but little effect.

Very seldom indeed, can an evacuation from the bowels be, by any means, procured with safety, very near the approach of a critical period.

Drastic purging in the commencement, not only disposes to diarrhea more late in the disease, but also to hemorrhage from the bowels.

The use of emetics, cathartics, and other reducing agents in the first week of typhus, will often render necessary, a very free use of tonics and stimulants in the after treatment, but when these have not been injudiciously used, nor the patient reduced by diarrhea or other debilitating discharges, only moderate support will generally be required. If, in the course of the disease, the

patient becomes suddenly much more affected by the medicines used, although not increased in quantity, it is an evidence, not only that they are used in over proportion to the present exciteability, but that, if they are now adapted to it, the patient will recover.

In predisposition to typhus, I have often seen the fever commence in the course of the twenty-four hours after the operation of an emetic or a cathartic, and think I have often seen the fever prevented in like state of predisposition, by rest and a moderate use of diffusible stimulants.

I have seldom, if ever, seen a dry and hard tongue or the teeth covered with sordes in typhus of the nervous type, unless when drastic purges had been used, or the patient had been reduced by a too free and injudicious use of mercurials, or had been in the use of antimonials. This dryness and hardness of the tongue, may often be much lessened by an infusion of capsicum.

By the same debilitating practice, the patient is also rendered unable to take that quantity of food which he otherwise might have taken, and which would have been an important means of support, and the stomach is brought into a state unfit to receive the usual impression from medicines, and to extend their usual and salutary effects to the rest of the system.

Among my patients who have recovered from typhus, I can recollect no instance of any permanent injury, neither organic or functional, that could be attributed either to the disease or method of cure. And, indeed, can now recollect no recovery which has not been perfect.

In this communication, intentionally avoiding all theory, I have endeavored to give a correct account of the diseases noticed, and also of my treatment of them. And I have been careful to notice particularly, not only such cases as were successfully treated, but every fatal case in which I thought *I could* see, or others *might* see, some mistake or error in practice; for such cases cannot be without their use. I have also inserted some facts which I thought might be of use to the practitioner, or afford matter for the speculations of the theorist.

This communication is the result of my own experience and observations, unshackled by existing theories, and uncontrolled by the opinions of men, justly esteemed for their talents and knowledge, when these have appeared founded, more on theory than on experience. And if my mode of treating these diseases should not accord with the practice of some of my medical brethren in this Association, it *may*, as I sincerely *hope* it will, call forth the communication of better practice from other members.

EAST WINDSOR, Feb. 14th, 1838.